## **Regulatory Guide Withdrawal Process**

Withdrawal questions regarding Regulatory Guide (RG) 2.4, Review of Experiments for Research Reactors

1) What regulation(s) did the RG support?

RG 2.4 provided guidance to applicants regarding their procedures to review experiments at research reactors that would meet the requirements of 10 CFR 50.36, *Technical Specifications*, and 10 CFR 50.59, *Changes, Tests, and Experiments*. The regulations require Technical Specifications to be included in the facility license. This guidance provided information to applicants on what should be included in technical specifications (TS) to conduct experiments, given that research reactors are generally designed specifically to perform certain types of experiments by virtue of their radiation emissions.

2) What was the purpose of the RG?

RG 2.4 provided guidance to applicants for the review of experiments at research reactors. The RG accepted for use American National Standards Institute (ANSI) N401-1974 (American Nuclear Society (ANS) -15.6), *Review of Experiments for Research Reactors*, with additional considerations and limitations expressed in the regulatory position section.

The standard provided definitions and addressed procedures for controls of experiments. This provided guidance for a licensee's program for review and approval of experiments performed at research reactor facilities. TS and the Safety Analysis Report (SAR) work in conjunction with an administrative experiment review process to assure the performance of experiments are enveloped within the facility license and meet the requirements of 10 CFR 50.59.

3) How was the Regulatory Guide used?

ANSI N401-1974 outlined an approach for applicants to develop procedures and technical specifications for the review of experiments performed at research reactor facilities to meet the requirements in 10 CFR 50.36 and 10 CFR 50.59. The NRC provided RG 2.4 to clarify acceptable methods for implementing the requirements listed in the industry standard.

4) Why is the Regulatory Guide no longer needed?

RG 2.4 was published in July 1976 to provide clarification on meeting the requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) part 50, "Domestic Licensing of Production and Utilization Facilities," for procedures acceptable to the NRC staff for a licensee's review and approval of experiments performed at research reactor facilities. The NRC published RG 2.4 to endorse American National Standards Institute (ANSI) N401-1974 (American Nuclear Society (ANS) 15.6), "Review of Experiments for Research Reactors," with exceptions and additional considerations, concerning performance of experiments which could be undertaken without affecting conditions of the facility license and thus could be performed without prior NRC approval. In 1982, ANS replaced the N401 (ANS 15.6) standard with ANS 15.1, "American National Standard for the Development of Technical Specifications for Research Reactors." ANS 15.6 is no longer supported by ANS, or available in print. Because RG 2.4 was written using the text of ANS 15.6 for reference, and because the standard no longer exists, the text within the RG no longer provides useful information. Additionally, NRC guidance for contemporary licensees is now provided as described in the answer to question 5.

5) What guidance is available once the Regulatory Guide is withdrawn?

NRC guidance on the development of appropriate controls for experiments at research reactors to be included in TS and the SAR is available within RG 2.2, *Development of Technical Specifications for Research Reactors* and also in NUREG-1537, *Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors*. Additional guidance is available for licensees in ANSI 15.1, *The Development of Technical Specifications for Research Reactors*, which the NRC refers to for staff guidance within NUREG-1537.

6) Is the RG referenced in other documents and what are the "ripple effects" on these documents if it is withdrawn?

NUREG-1537 identifies RG 2.4 in Chapter 10, "Experimental Facilities and Utilization." NUREG-1537 is under revision, and the NRC plans to remove the reference to RG 2.4. Because NUREG-1537 identifies both RG 2.2 and RG 2.4 as sources of guidance, the invalidity of the reference to RG 2.4 will not change the guidance provided by NUREG-1537.

7) What is the basis for believing that no guidance similar to that in the RG will ever be needed?

The NRC is withdrawing the RG because it is outdated and refers to a withdrawn standard that is unavailable for use. Sufficient guidance exists elsewhere.

8) Will generic guidance still be needed?

Generic guidance is needed for the development or modification of technical specifications, and is currently available through RG 2.2 and NUREG-1537.

9) What is the rationale for withdrawing this Regulatory Guide instead of revising it?

The RG was published in 1976 and contains guidance which relates to a standard which is no longer in use. Thus the information no longer provides useful information. ANS 15.1, which replaced ANS 15.6 in 1982, is referenced by NUREG-1537 (1996) and therefore updating RG 2.4 to refer to ANS 15.1 would be redundant.

10) Do other agencies rely upon the RG, e.g., the Agreement States, National Aeronautical and Space Administration, Department of Energy?

The staff is unaware of any other agency that uses or relies on this outdated guidance included in RG 2.4.